# Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

In the Matter of:		
Implementation of Sections 309(j) and 337 of	)	
The Communications Act of 1934 as Amended;	j	WT Docket No. 99-87
<b>Promotion of Spectrum Efficient Technologies</b>	ĺ	
On Certain Part 90 Frequencies.	í	

REQUEST FOR TIME EXTENSION OF WAIVER OF COMMISSION RULES REGARDING THE SPECTRAL EFFICIENCY OF PRIVATE LAND MOBILE RADIO SERVICES IN THE 150-174 AND 450-470 MHZ BANDS, REQUIRING 12.5 KHZ CHANNEL BANDWIDTH OR EQUIVALENT TECHNOLOGY BY OCTOBER 16, 2017

#### WAIVER—EXPEDITED ACTION REQUESTED

(A) The County of Augusta, Virginia ("County") respectfully requests a CONTINUED TIME EXTENSION of the narrowband deadline waiver presently expiring on December 31, 2016, for an additional period, until October 16, 2017. In support of this request, the following information is submitted.

Respectfully submitted,

December 23, 2016

County Administrator, Timothy K. Fitzgerald County of Augusta, VA

18 Government Center Lane, P. O. Box 590

Verona, VA 24482

- (1) Augusta County ("County") is situated with radio transmitting sites within the defined Quiet Zone (QZ)<sup>1</sup>. The County's communications system supports public safety activities for police, fire and emergency medical communications.
- (2) The County public safety radio system supporting first responders was operating successfully in a wide band (20 kHz occupied bandwidth) mode. In the process of relicensing that existing public safety radio system stations to narrowband (11.25 kHz occupied bandwidth) mode, that proposed change resulted in the National Radio Astronomy Observatory ("NRAO") approval process imposing severe reductions in transmitted directional effective radiated power ("dERP") toward the NRAO site for those County system stations that are in the Quiet Zone. For the stations outside of the Quiet Zone, the County was able to simply modify the license to reduce bandwidth and retain existing technical parameters such as antenna type, antenna height, HAAT, and ERP. (As an example, the change in dERP at one site was reduced from 212 Watts dERP to 1.5 Watts dERP.) As a result, the County lost some communications coverage of its service area. That loss of coverage would impact the safety of first responders and the citizens they serve. So the County redesigned the radio system to add additional base stations and microwave backhaul capability to remedy the problem. Integrating those new facilities into the County radio system has caused significant delays for reasons beyond the County's control.
- (3) The move to narrowbanded operation requires all stations of the system to be in place and cut-over at the same time. Additionally, the new microwave backhaul stations

<sup>&</sup>lt;sup>1</sup> 47 CFR § 1.924(a)Quiet Zones - intended to minimize possible interference at the National Radio Astronomy Observatory site located at Green Bank, Pocahontas County, West Virginia, and at the Naval Radio Research Observatory site at Sugar Grove, Pendleton County, West Virginia.

likewise have to be in place to effect the cut-over. The radio authorizations of this communications system that are the subject of this waiver extension request are listed in Appendix A.

- (4) The stations of the radio system directly affected by the newly-imposed NRAO dERP limitations to the narrowband-configured radio system are listed in APPENDIX B.
- (5) The Commission recently granted the County extension of time to construct the WQUR900, WQUR901 microwave link, to 7/31/2017. Though not the subject of this waiver request, these stations are never-the-less necessary to the operation of the radio system in narrowband mode because they provide backhaul; capability. The same elements that have delayed the complete implementation of the microwave stations also affect those new UHF stations that had to be added to restore service area coverage. We quote from that microwave extension submission:
- "... when the VSP {Virginia State Police] attempted to modify its existing Forest Service permit on Elliot Knob to allow installation of Augusta's [County's] microwave facilities, the Forest Service determined that a new permit would be required. That permit has been obtained but not within the original time frame anticipated."

That same impediment has delayed the UHF installation at that site.

- (6) We further quote from that extension filing:
- "... [S]evere weather has caused significant damage to the roads used to access the Elliott
  Knob transmitter site. ... Augusta [the County] is working with the site owners to share the

cost of the road repairs and a contract has been signed with a construction company.

Repairs are scheduled to begin November 1, 2016. With the advent of winter weather, road repairs are unlikely to be complete until spring." Subsequent to that WQUR900 and WQUR901 extension grant, the County has expedited and completed access road repairs to Elliot Knob. However, the revised VSP tower lease permit is still pending so that no site work can be completed (See Appendix B1).

"Initial equipment installation at the Deerfield [microwave] site has been complete except for the [microwave] dish orientation which cannot be completed until the Elliott Knob facility has been installed."

(6) The County has moved expeditiously to implement the radio system in narrowband mode. Funding is and has been available to complete the work. All radio equipment required for all stations is on hand and under the control of the County at the sites and/or staging areas.

Upon completion of physical installation work, there will be individual sub-system, and full- system tests before cut-over from the existing wideband system. Field test measurements will be made during the season when deciduous and evergreen ground cover is in full bloom.

(7) The County has one form FCC601 at APCO, the coordination certification body, for a station at Craigsville, VA (Troxell Gap). It is within the Quiet Zone. Notification to the NRAO for this station was made on 11/09/2016.

- (8) APPENDIX C provides a summary of status and the time to completion.
- (B) The County has sought to expedite completion of the radio system in narrowband mode in good faith while cognizant of its responsibility to protect the public and the safety and efficiency of emergency responders. For the reasons stated above and in consideration that such action would be in the public interest, the County requests grant of the narrowband time extension, to October 16, 2017.

**APPENDIX A** 

LIST OF FCC RADIO AUTHORIZATIONS GRANTED TO THE COUNTY OF AUGUSTA, VA FOR WHICH WAIVER OF THE DECEMBER 31, 2016 NARROWBAND OPERATION DEADLINE IS REQUESTED, TO OCTOBER 16, 2017:

Call Sign	FRN	Frequency	Class	Service
KDA670	0002036044	451.0250	FB2	PW
KDA670	0002036044	451.0750	FB2	PW
KDA670	0002036044	456.0250	MO	PW
KDA670	0002036044	456.0750	MO	PW
KNFY393	0002036044	460.4000	FB2	PW
KNFY393	0002036044	465.0750	MO	PW
KNFY393	0002036044	465.4000	MO	PW
WNMW815	0002036044	453.7500	FB2	PW
WNMW815	0002036044	453.9250	FB2	PW
WNMW815	0002036044	458.7500	MO	PW
WNMW815	0002036044	458.9250	MO	PW
WPHE291	0002036044	458.3000	MO	PW
WPHE291	0002036044	460.3000	FB2	PW
WPHE291	0002036044	465.3000	MO	PW
WPKQ976	0002036044	460.5500	FB2	PW
WPKQ976	0002036044	465.5500	MO	PW
WPPC506	0002036044	456.0250	FX	PW
WPPC506	0002036044	458.0750	FX	PW
WPPC506	0002036044	458.9250	FX	PW

PETITION FOR WA	NIVER EXTENSION	FRN: 000203	36044	COUNTY OF AUGUSTA, VIRGINIA
WPPC506	0002036044	458.7500	FX	PW
WZM674	0002036044	462.9500	FB2	PW/PM
WZM674	0002036044	462.9750	FB2	PW/PM
WZM674	0002036044	463.0000	FB2	PW/PM
WZM674	0002036044	463.0250	FB2	PW/PM
WZM674	0002036044	463.0500	FB2	PW/PM
WZM674	0002036044	463.0750	FB2	PW/PM
WZM674	0002036044	463.1000	FB2	PW/PM
WZM674	0002036044	463.1250	FB2	PW/PM
WZM674	0002036044	463.1500	FB2	PW/PM
WZM674	0002036044	463.1750	FB2	PW/PM
WZM674	0002036044	467.9500	MO	PW/PM
WZM674	0002036044	467.9750	MO	PW/PM
WZM674	0002036044	468.0000	MO	PW/PM
WZM674	0002036044	468.0250	MO	PW/PM
WZM674	0002036044	468.0500	MO	PW/PM
WZM674	0002036044	468.0750	MO	PW/PM
WZM674	0002036044	468.1000	MO	PW/PM
WZM674	0002036044	468.1250	MO	PW/PM
WZM674	0002036044	468.1500	MO	PW/PM
WZM674	0002036044	468.1750	MO	PW/PM
WPLX499	0005517081	458.7500	FX	PW
WPLX500	0005517081	458.7500	FX	PW
WPLX501	0005517081	458.7500	FX	PW

PETITION FOR WA	IVER EXTENSION	FRN: 000203	36044	COUNTY OF AUGUSTA, VIRGINIA
WPLX523	0005517081	465.5500	FX	PW
WPLX524	0005517081	460.5500	FB	PW
WPLZ932	0005517081	460.5500	FB	PW
WPLZ935	0005517081	460.5500	FB	PW
WPLZ935	0005517081	465.5500	FX	PW
WPZR590	0007189301	451.2500	FBT	IG

### APPENDIX B

## LICENSES DIRECTLY IMPACTED BY NRAO ERP LIMITS SHOWING PRE- AND POST NARROWBAND dERP LIMITS IMPOSED.

Call Sign	Location	NRAO dERP Pre- NB (w)	NRAO dERP Post NB (w)
WNMW815	1	212	1.5
WNMW815	3	25	1.4
WPHE291	1	212	1.5
WPHE291	3	25	1.4
WPKQ976	1	212	1.6
WPKQ976	3	25	1.4
KDA670	1	212	1.5
KDA670	3	25	1.4
KNFY393	1	212	1.5
KNFY393	3	128	1.4
WZM674	1	212	4.2
WZM674	3	25	25

#### **APPENDIX B-1**

EMAIL CORRESPONDENCE, COMMONWEALTH OF VIRGINIA (ELIZABETH M. DUKETTE) TO COUNTY OF AUGUSTA, VA, DATED DECEMBER 12, 2016; ELLIOTT KNOB

From: Dukette, Liz (DGS) [mailto:Liz.Dukette@dgs.virginia.gov]

Sent: Monday, December 12, 2016 10:48 AM

Cc: Eve, Holly (DGS)

Subject: RE: State Police Tower Leases

Good Morning,

The Commonwealth would like to thank everyone for their efforts in moving along the Elliott Knob permit negotiations. The negotiations with the United States Forest Service ("USFS") has consistently been a priority for the Commonwealth, since the Elliott Knob STARS (Statewide Agency Radio System) communication tower is an emergency responder tower that is used to assure the continued safety of Virginia's residents in Augusta county.

Our office would like to address the recent inquiries regarding the Commonwealth's ability to co-locate tenants on the Elliott Knob tower under terms of the 2009 Elliott Knob permit agreement between the Virginia State Police ("VSP") and the USFS. Unfortunately, the Commonwealth does not have the requisite legal authority to co-locate any tenants on these towers. The 2009 Elliott Knob permit is not valid, because it did not get the required approvals as required by the Code of Virginia §2.2-1149. Per §2.2-1149, "...no state department, agency or institution shall acquire real property by gift, lease, purchase or any other means or use or occupy real property without following the guidelines adopted by the Department [of General Services] and obtaining the prior approval of the Governor" (bold added). Within the past year our office identified that the 2009 Elliott Knob permit, along with a number of other permits entered into between VSP and USFS, was never reviewed by the Department of General Services and did not get the Governor's approval as required by law.

Upon review of the 2009 Elliott Knob permit, the permit could not be approved by the Commonwealth as written and the terms of the permit had to be renegotiated. The legal departments of the Commonwealth and the USFS collaborated in developing permit language to meet the needs of both parties. The Commonwealth is ready to execute the language as written and is awaiting response from the USFS Washington Office to move forward.

FRN: 0002036044

Thank you for your continued patience and cooperation with this process. If you have any further questions regarding the 2009 Elliott Knob permit, please contact either myself or the Director of the Department of General Services, Division of Real Estate Services (DRES), Holly Law Eve, who is copied above.

Kind Regards,

Liz

Elizabeth M. Dukette, Esq.

Paralegal - Division of Real Estate Services (DRES)

Department of General Services

Tel: 804-786-1030

APPENDIX C
STATUS AND PROJECTED TIME TO COMPLETION OF NARROWBANDING

Task Name	Start	Finish	Status / New Finish Date
Augusta County Narrowband Project Schedule	Tue 12/29/15	Mon 12/12/16	Change to October 16, 2017
Award Contract to Motorola	Tue 12/29/15	Tue 12/29/15	COMPLETED
Contract Design Review	Wed 12/30/15	Fri 03/04/16	COMPLETED
Order Processing, Equipment  Manufacturing & Delivery (2)	Mon 03/07/16	Fri 06/24/16	COMPLETED
Civil and Site Work Development	Wed 12/30/15	Tue 08/09/16	07/31/2017
Elliot's Knob (1)	Wed 12/30/15	Mon 06/13/16	04/30/2017
Massanutten (1)	Wed 12/30/15	Tue 08/09/16	04/30/2017
Devil's Knob (1)	Wed 12/30/15	Mon 08/08/16	04/30/2017
Troxell Gap (1)	Tue 07/19/16	Mon 08/01/16	07/31/2017
Verona	Wed 12/30/15	Thu 08/04/16	04/30/2017
Equipment Installation and Optimization	Fri 09/30/16	Thu 11/17/16	09/11/2017
Final Testing and Cutover	Fri 11/18/16	Mon 12/12/16	10/16/2017
Troxell Gap Site Development	Mon 01/11/16	Mon 7/18/16	07/31/2017
Contract Award	Mon 01/11/16	Mon 01/11/16	COMPLETED
Environmental Regulatory / NEPA/ SHPO	Tue 01/12/16	Mon 05/02/16	COMPLETED
Tower Site Design	Mon 01/25/16	Mon 02/22/16	COMPLETED
Zoning and Permitting	Tue 02/23/16	Tue 05/03/16	COMPLETED
Tower Design, Geotech/ Structural Design	Mon 04/18/16	Mon 05/09/16	COMPLETED
Site Construction	Mon 06/13/16	Mon 07/18/16	07/31/2017
Troxell Gap Complete	Mon 07/18/16	Mon 07/18/16	07/31/2017

Notes: (1) Mountain top site; site and access affected by inclement weather.

<sup>(2)</sup> Delivered to County; currently under County control at site and/or staging location.